

**Georgia Department of Natural Resources**  
**Environmental Protection Division • Coastal District**  
400 Commerce Center Drive • Brunswick • Georgia 31523-8251  
Phone: 912/264-7284  
Mark Williams, Commissioner  
F. Allen Barnes, Director

FILE COPY  
FILE COPY

September 26, 2011

Mr. Keith Morgan, Executive Director  
Brunswick – Glynn County Joint Water & Sewer Commission  
700 Gloucester Street  
Brunswick, Georgia 31520

RE: Glynn County – Exit 29 Water Pollution Control Plant (WPCP)  
Compliance Evaluation Inspection  
NPDES Permit No. GA0038938  
Glynn County

Dear Mr. Morgan:

On September 19, 2011 the Environmental Protection Division performed a Compliance Evaluation Inspection on the above referenced water pollution control plant. Mr. Mark Ryals, Wastewater Superintendent, Mr. Alvin Lang, Class I Wastewater Operator, Mr. Anthony Crawford, Class I Wastewater Operator at the WPCP, Mr. Glenn Henderson, lift station superintendent with Joint Water & Sewer Commission, accompanied Ms. Kelly Kutrufis and me, representing the Division, during the inspection. A copy of the inspection report is enclosed for your review and files.

As discussed with Mr. Ryals et. al., the following operational issues should be addressed:

1. Physically scrape and remove macro solids escaping the influent bar screen entering the oxidation ditches.
2. Separate trash currently mixed with belt-pressed sludge being disposed at Broadhurst MSWL. An accurate tonnage sludge removed is necessary.
3. Repair a couple of alarm systems at lift stations visited with Mr. Glenn Henderson of Joint Water & Sewer Commission. Specifically, station #3114 (Sommersby) audible alarm, and station #3103 (Royal Oaks #1) visual alarm malfunctioned during demonstrations.

The Division recommends the secondary clarifier presently off-line be repaired and available for service should the need arise.

You are reminded that Consent Order EPD-WQ-5281 remains open. As discussed, a written report indicating measures to obtain compliance for phosphorous will be due no later than December 22, 2011.

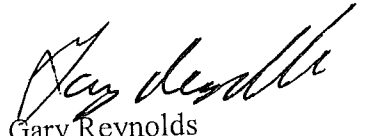
Please provide written confirmation that items 1 to 3 have been corrected no later than November 1, 2011.

Exit 29 WPCP  
Page Two  
September 26, 2011

The Division appreciates the time taken by Joint Water & Sewer Commission representatives to accompany the inspection.

Should you have any questions regarding the enclosed report, please contact me at 912-264-7284.

Sincerely,



Gary Reynolds  
Environmental Specialist III  
Coastal District Office

\gr

INDUSTRIAL			MUNICIPAL	X
NPDES	CEI	X	RECON	
LAS	CEI		RECON	

# Georgia Department of Natural Resources

Environmental Protection Division • Coastal District  
 400 Commerce Center Drive • Brunswick • Georgia 31523-8251  
 Phone: 912/264-7284  
 Mark Williams, Commissioner  
 F. Allen Barnes, Director

*DM*

## Compliance Evaluation Inspection Checklist

Facility Name: <b>Exit 29 WPCP</b>		County: <b>Glynn</b>
Permit No. <b>GA0038938</b>	Permit Effective Date <b>7/12/11</b>	Permit Expiration Date <b>2/24/13</b>
Name of On-site Representative <b>Anthony Crawford</b>	Phone <b>(912) 318-2126</b>	Fax <b>(912) 261-7172</b>
Inspection by <b>Gary Reynolds/ Kelly Kutrufis</b>	Date of Inspection <b>September 19, 2011</b>	Name of Receiving Stream <b>Little Satilla River</b>

### AREA EVALUATED DURING INSPECTION (S = Satisfactory, M = Marginal, U = Unsatisfactory)

<input checked="" type="checkbox"/> Permit	<input checked="" type="checkbox"/> Secondary Clarifier	<input type="checkbox"/> Treatment Pond(s)	<input checked="" type="checkbox"/> Effluent/Receiving Waters
<input checked="" type="checkbox"/> Records/Reports	<input checked="" type="checkbox"/> Disinfection	<input type="checkbox"/> Storage Pond(s)	<input checked="" type="checkbox"/> Operations & Maintenance
<input checked="" type="checkbox"/> Facility Site Review	<input checked="" type="checkbox"/> Aerobic Digester	<input type="checkbox"/> Distribution System	<input checked="" type="checkbox"/> Sludge Disposal
<input type="checkbox"/> LAS Facility Site Review	<input type="checkbox"/> Anaerobic Digester	<input checked="" type="checkbox"/> Collection System	<input checked="" type="checkbox"/> Bio-solid Report
<input checked="" type="checkbox"/> Preliminary Treatment	<input type="checkbox"/> Filtration	<input type="checkbox"/> Constructed Wetlands	<input checked="" type="checkbox"/> Safety
<input type="checkbox"/> Trickling Filter	<input checked="" type="checkbox"/> Chemical Treatment Equip.	<input checked="" type="checkbox"/> Flow Measurement	<input checked="" type="checkbox"/> Plant Grounds
<input checked="" type="checkbox"/> Activated Sludge Tanks	<input checked="" type="checkbox"/> Sludge Dewatering	<input checked="" type="checkbox"/> Laboratory	<input checked="" type="checkbox"/> Notes/Diagrams

### SAMPLE DMR RECORD – 12 months

(S = RESULTS ACCEPTABLE, V = RESULTS EXCEED PERMIT LIMITS, X = RESULTS NOT SUBMITTED)

MONTH	9/10	10/10	11/10	12/10	1/11	2/11	3/11	4/11	5/11	6/11	7/11	8/11
RESULTS	V	V	V	V	S	S	S	S	S	S	S	S

### Section A - PERMIT

1. Current copy of facility's permit available on-site.	Yes	No	NA
2. Correct name and mailing address of permittee identified on permit.	Yes	No	NA
3. Facility is as described in permit.	Yes	No	NA
4. Notification given to the Division of expansions, production increases, or process modifications.	Yes	No	NA
5. Recent permit modifications, amendments or compliance orders in facility file.	Yes	No	NA
6. Number of discharge outfalls the same as listed in the permit.	Yes	No	NA
7. Name of receiving waters listed correctly in the permit.	Current		
8. Permit status (i.e., current, expired, or extended)	Yes	No	NA
9. Permit renewal application submitted to the Division within 180 days of expiration date.			
10. Has there been any facility expansions, production increases, or process modifications that have changed the discharge since the issuance of the permit?	Yes	No	NA
11. Has permittee properly notified the Division of modifications of all process discharge changes?	Yes	No	NA
12. If required, is the operator properly certified? Certification number <b>Anthony Crawford(WWI-014639)</b>	Yes	No	NA



(WW1-014639)		
13. Date GPS performed and reported: <u>9 / 19 / 11</u>		
Location of GPS determination: <i>Plant entrance outside the office.</i>		<b>Yes</b> No
14. Facility in compliance with Section A above?		
Notes: <i>The WPCP expanded and obtained approval from the Division from a .300 MGD overmarsh spray to a 1.5 MGD direct discharge Plant. With low volume, the Plant has struggled meeting its phosphorous limits, and a Consent Order, EPD-WQ-3281, was issued to Joint Water &amp; Sewer Commission March 22, 2011. The Consent Order remains open, on-schedule, pending an explanation as to how achievement with phosphorous limits was obtained. The JWSC has until December 2011 to provide the written report. They have obtained phosphorous compliance from January 2011 through August 2011.</i>		

## Section B - RECORDS/REPORTS

	Yes	No	NA
1. Records maintained for time period required (3 years).	<b>Yes</b>	No	NA
2. a. Spills and bypasses reported and documented as required by the permit.	<b>Yes</b>	No	NA
b. Follow-up written documentation given as required by the permit (within 5 days).	<b>Yes</b>	No	NA
3. Discharge Monitoring Report (DMR) evaluation:	<b>Yes</b>	No	NA
• The responsible person or designee signs and certifies the DMR.	Yes	<b>No</b>	NA
• The facility not monitoring at frequency by permit.	Yes	No	<b>NA</b>
• The facility monitors more frequently than required by the permit. Is the data included?	Yes	<b>No</b>	NA
• The facility not sampling the parameters required by the permit.	<b>Yes</b>	No	NA
• All data collected are summarized on the DMR.	<b>Yes</b>	No	NA
• The facility is reporting in the units required by the permit (lbs/day or kg/day).	<b>Yes</b>	No	NA
• Data reported on DMR consistent with analytical results.	<b>Yes</b>	No	NA
• Coliform concentration calculated as required by the permit (e.g., median, geometric mean)	<b>Yes</b>	No	NA
• Check flow and sample data to be the same.	<b>Yes</b>	No	NA
• Numerical values for minimum detection limits are reported on DMR when laboratory reports "Not Detected".	<b>Yes</b>	No	NA
• Is the facility composite/grab sampling where required by permit?	<b>Yes</b>	No	NA
• Number Exceeding (N.E.) properly reported on all DMR's and annual reports.	<b>Yes</b>	No	NA
• Reports completed in time frame and frequency as required by the permit.	<b>Yes</b>	No	NA
4. Sampling and analytical records include:	<b>Yes</b>	No	NA
• Dates, times, and location of sampling	<b>Yes</b>	No	NA
• Names of individuals performing sampling	<b>Yes</b>	No	NA
• Analytical methods (40 CFR Part 136)	<b>Yes</b>	No	NA
• Results of analyses	<b>Yes</b>	No	NA
• Dates of analyses	<b>Yes</b>	No	NA
• Analysts' names or initials	<b>Yes</b>	No	NA
5. Plant records include:	<b>Yes</b>	No	NA
• Daily plant operational records or log book	<b>Yes</b>	No	NA
• Equipment maintenance records and schedules	<b>Yes</b>	No	NA
• Records of auxiliary power checks	Yes	No	NA
• Other	<b>Yes</b>	No	NA
6. All records and reports required by the permit appear to be organized and available for inspection.	<b>Yes</b>	No	NA
7. Compliance Schedules/Orders	<b>Yes</b>	No	NA
• Facility is subject to a compliance schedule in either its permit or in an order.	<b>Yes</b>	No	NA
• Items in the compliance schedule, which are currently due, have been completed (includes both the permit and orders).	<b>Yes</b>	No	NA
• The permittee has a plan to comply with items in the compliance schedule coming due in the future (includes both the permit and orders).	<b>Yes</b>	No	NA
8. If required, is the facility within a permit schedules?	<b>Yes</b>	No	NA
• WET test	<b>Yes</b>	No	NA



<ul style="list-style-type: none"> <li>• Priority pollutants</li> <li>• Long time BOD testing</li> <li>• Increased monitoring</li> <li>• TRC</li> <li>• Fecal</li> <li>• Watershed Protection Plan</li> <li>• Annual reporting</li> </ul>	<b>Yes</b> No NA Yes No <b>NA</b> Yes No <b>NA</b> Yes No <b>NA</b> Yes No <b>NA</b> <b>Yes</b> No NA <b>Yes</b> No NA
9. Facility in compliance with Section B above?	<b>Yes</b> No
Notes: <i>As this is an expanded facility, four priority pollutant scans, and four WET analyses were required. Thus far, two of three WET quarters have failed. The NPDES Permit was reopened, and a WET limit has been established. The facility must Demonstrate three (3) consecutive "pass" WET results, then they may request from the Division annual WET monitoring.</i>	

### Section C - FACILITY SITE REVIEW

1. All treatment units and supporting equipment are in service and mechanically functioning properly. <i>One of two clarifiers is down, due to a leaking seal; however, due to low flow, not critical.</i>	Yes <b>No</b> NA
2. Hydraulic and organic loadings are consistent with plant design criteria. a. Are there signs of overloading to the facility and collection system, including I&I and septage loading?	Yes <b>No</b> NA
3. Peak flows remain within the established plant capacity.	<b>Yes</b> No NA
4. Lift stations are properly monitored, maintained, have a back-up power source and are not subject to chronic spills and/or overflows.	<b>Yes</b> No NA
5. Odors are adequately controlled, resulting in limited complaints.	<b>Yes</b> No NA
6. Housekeeping procedures are adequate to prevent release of pollutants to environment: <ul style="list-style-type: none"> <li>• Adequate dikes and secondary containment</li> <li>• Spill containment and clean-up</li> <li>• Signs of spillage to soil, groundwater, or surface water</li> <li>• Storm water and leachate management from storage piles</li> <li>• Leaking pipes, pumps, etc.</li> <li>• Drum and chemical storage areas</li> <li>• Minimization of pollutants entering storm water outfalls</li> <li>• Other open dumps or debris piles</li> <li>• Other</li> </ul>	Yes No <b>NA</b> <b>Yes</b> No NA Yes <b>No</b> NA Yes No <b>NA</b> Yes No <b>NA</b> Yes No <b>NA</b> <b>Yes</b> No NA Yes No <b>NA</b>
7. Signs of tank deterioration and/or settlement.	Yes <b>No</b> NA
8. Safety concerns may interfere with proper operation, maintenance, and/or monitoring.	Yes No <b>NA</b>
9. Material Safety Data Sheets (MSDS) are available for stored chemicals.	<b>Yes</b> No NA
10. Is toxicity suspected in the effluent?	Yes <b>No</b> NA
11. Equipment available for spill cleanup and containment.	<b>Yes</b> No NA
12. Facility is in compliance with Section C above?	<b>Yes</b> No NA
Notes: <i>A lift station near the Plant had a minor spill from Lift Station 101 due to a breaker tripping. While the station had SDADA, the back-up battery was dead. They implemented procedures for checking batteries at the stations routinely.</i>	

### Section C - 1 LAS FACILITY SITE REVIEW

**NA**

1. Excessive scum, grease, foam or floating sludge in clarifiers.	Yes No NA
2. Severe corrosion of structures.	Yes No NA
3. Vital equipment out of service.	Yes No NA
4. Unusual or improvised equipment.	Yes No NA
5. Overflowing of influent lines, overflow weirs or other structures.	Yes No NA
6. Overflows at alternate discharge points, bypass, or any unpermitted discharges (give location):	Yes No NA
7. Pipes from process/storage areas that exhibit evidence of discharge to the ground or to surface water.	Yes No NA
8. Spraying into buffer zone or adjacent surface water.	Yes No NA
9. Spraying into on-site drainage or on-site surface water.	Yes No NA
10. Surface runoff.	Yes No NA

11. Erosion or Gullies.	Yes	No	NA
12. Sparse Vegetation.	Yes	No	NA
13. Pooling of Water.	Yes	No	NA
14. Leaf Defoliation or Discoloration.	Yes	No	NA
15. Presence of ground water.	Yes	No	NA
16. Unapproved vegetation in use.	Yes	No	NA
17. Are meters calibrated as required in the LAS permit?	Yes	No	NA
18. Are applications rates in compliance with the LAS permit?	Yes	No	NA
19. Are groundwater wells properly labeled and maintained?	Yes	No	NA
20. Is sampling being conducted at the proper locations in accordance with the LAS permit?	Yes	No	NA
21. Facility is in compliance with this Section.	Yes	No	
Notes:			

<b>Section D</b>	<b>PRELIMINARY TREATMENT</b>	<b>NA</b>				Yes	No	NA
1. Excessive debris on bar screen.						Yes	No	NA
2. Grit chamber clogged.						Yes	No	NA
3. Grit and screenings improperly contained.						Yes	No	NA
4. Any preliminary treatment equipment out of service.						Yes	No	NA
5. Facility is in compliance with this Section D above.						Yes	No	NA
Notes:								

<b>Section E</b>	<b>TRICKLING FILTER</b>	<b>NA</b>				Yes	No	NA
1. Trickling filter ponding.						Yes	No	NA
2. Distribution arm center column leaking.						Yes	No	NA
3. Uneven distribution of flow on surface.						Yes	No	NA
4. Sparse, uneven or thin growth on surface.						Yes	No	NA
5. Color of growth						Yes	No	NA
6. Distribution arm orifices clogged.						Yes	No	NA
7. Restricted rotation of distribution arms.						Yes	No	NA
8. Filter flies.						Yes	No	NA
9. Trash on media surface.						Yes	No	
10. Facility is in compliance with this Section E above.						Yes	No	
Notes:								

<b>Section F</b>	<b>ACTIVATED SLUDGE TANKS</b>	<b>NA</b>				Yes	No	NA
1. Dead spots, dark foam or bad order.						Yes	No	NA
2. Surface aerator or compressor failure.						Yes	No	NA
3. Blower/aerator on timer Interval <i>continuous</i>						Yes	No	NA
4. Air rising in clumps (boiling).						Yes	No	NA
5. Leaks in compressed air piping. <i>oxidation ditch</i>						Yes	No	NA
6. Dark mixed liquor or dark tan foam.						Yes	No	NA
7. Thick billows of shite, sudsy form.						Yes	No	NA
8. Low dissolved Oxygen (<1 mg/L) Actual D.O. <i>2.0 mg/l</i>						Yes	No	NA
9. MLSS concentration <i>2,000</i> . Excessive or low						Yes	No	NA
10. Facility is in compliance with this Section F above.						Yes	No	NA
Notes:								



Section G SECONDARY CLARIFIER		NA		
1. Excessive gas bubbles on surface.	Yes	No	NA	
2. Overflow weirs fouled or not level.	Yes	No	NA	
3. Short-circuiting overflow.	Yes	No	NA	
4. Buildup of solids in center well of circular clarifier.	Yes	No	NA	
5. Pin floc in overflow	Yes	No	NA	
6. Scum rake ineffective or overloaded.	Yes	No	NA	
7. Sludge floating on surface, clumping.	Yes	No	NA	
8. Billowing sludge or sludge blanket too high. Depth <i>1" thickness</i>	Yes	No	NA	
9. Sludge withdrawal ports clogged.	Yes	No	NA	
10. Evidence of a solids washout.	Yes	No	NA	
11. Sludge judge not available.	Yes	No	NA	
12. Facility is in compliance with this Section G above.	Yes	No		
Notes: <i>The one functioning clarifier was well-maintained, functioning properly. One clarifier has been out of service for a couple of months, and although low flow presently, the leaking seal should be repaired and the unit operational in case of increased flow or need.</i>				

Section H DISINFECTION		NA		
1. Excessive gas bubbles on surface.	Yes	No	NA	
2. Sludge buildup in contact chamber.	Yes	No	NA	
3. Short-circuiting of flow.	Yes	No	NA	
4. Inadequate detention time.	Yes	No	NA	
5. Foaming at outfall or downstream. <i>Outfall to Little Satilla River not observed.</i>	Yes	No	NA	
6. Floating scum and/or solids in chamber.	Yes	No	NA	
7. Chlorine feed rate <i>N/A (U/V only)</i> . Flow proportioned? <i>N/A</i>	Yes	No	NA	
8. Chlorine tank empty or nearly so.	Yes	No	NA	
9. Feed equipment non-operational.	Yes	No	NA	
10. In UV systems, are bulbs cleaned regularly?	Yes	No	NA	
11. In UV systems, are replacement bulbs available?	Yes	No	NA	
12. Facility is in compliance with this Section H above.	Yes	No		
Notes: <i>The operator logs weekly cleaning of the U/V bulbs, and has adequate replacement bulbs at the facility.</i>				

Section I AEROBIC DIGESTER		NA		
1. Excessive foaming or bad odor.	Yes	No	NA	
2. Clogging of diffusers. <i>Oxidation ditch – paddle mechanism.</i>	Yes	No	NA	
3. Mechanical aerator failure.	Yes	No	NA	
4. Insufficient D.O. in digester. Actual D.O. <i>2.0 mg/l</i>	Yes	No	NA	
5. Facility is in compliance with this Section I above.	Yes	No	NA	
Notes:				

Section J ANEROBIC DIGESTER		NA		
1. Mixers or heater not operating.	Yes	No	NA	
2. Floating cover tilting.	Yes	No	NA	
3. Gas burner not burning or inoperative.	Yes	No	NA	
4. Supernatant exuding sour odor	Yes	No	NA	
5. Facility is in compliance with this Section J above.	Yes	No	NA	
Notes:				



**Section K FILTRATION (Sand filters, etc.)**

NA

1. Filter surface clogged; ponding	Yes	No	NA
2. Gravel displacement of filter media.	Yes	No	NA
3. Formation of mud balls in filter media.	Yes	No	NA
4. Loss of filter media during backwashing.	Yes	No	NA
5. Trash or vegetation on media surface	Yes	No	NA
6. Facility is in compliance with this Section K above.	Yes	No	

Notes:

**Section L****CHEMICAL TREATMENT EQUIPMENT**

NA

1. Heavy corrosion evident.	Yes	No	NA
2. Chemicals left in open atmosphere.	Yes	No	NA
3. Chemical containers stored improperly or in a hazardous manner.	Yes	No	NA
4. Dry chemical spilled between storage area and feed units.	Yes	No	NA
5. Empty chemical containers improperly disposed of.	Yes	No	NA
6. Liquid chemical feed units not appropriately contained (berm/dikes).	Yes	No	NA
7. Chemical dust covering feed unit area, storage or transfer areas.	Yes	No	NA
8. Ruptures in chemical feed line.	Yes	No	NA
9. Facility is in compliance with this Section L above.	Yes	No	

Notes:

*Bulk alum dosing, to control phosphate, with adequate protective dikes.***Section M****SLUDGE DEWATERING**

NA

1. How many drying beds? <i>None – belt pressed sludge directly to containers, hauled to Broadhurst MSWL.</i>	Yes	No	NA
2. Poor sludge distribution on drying beds.	Yes	No	NA
3. Sludge applied to already full bed.	Yes	No	NA
4. Vegetation in drying beds.	Yes	No	NA
5. Dry sludge remaining in drying beds.	Yes	No	NA
6. Sludge runoff from plant site.	Yes	No	NA
7. Mechanical dewatering system failure.	Yes	No	NA
8. Spilled sludge around dewatering units.	Yes	No	NA
9. Sludge stockpiled on plant grounds.	Yes	No	NA
10. Facility is in compliance with this Section M above.	Yes	No	NA

Notes:

*The only sludge operational deficiency observed, as pointed out to the operator, was allowing construction and demolition wastes mixed with the pressed sludge. Although both transported to Broadhurst MSWL, a skewed tonnage results. The operator agreed separate from sludge loads.***Section N TREATMENT POND(S)**

NA

1. Erosion of bank or dike; animal burrows.	Yes	No	NA
2. Weeds in pond or along dike at water line.	Yes	No	NA
3. Foaming and/or spray in aerated lagoon.	Yes	No	NA
4. Scum or debris accumulation along dike.	Yes	No	NA
5. Odor, foam, floating solids or oil sheen.	Yes	No	NA
6. Bypass of one or more pond cells.	Yes	No	NA
7. Effluent structure improperly maintained.	Yes	No	NA
8. Excessive sludge buildup.	Yes	No	NA
9. Excessive algae or duckweed	Yes	No	NA
10. Facility is in compliance with this Section N above.	Yes	No	

Notes:

NA			
Section O STORAGE POND(S)			Yes No NA
1. Erosion of bank or dike; animal burrows.			Yes No NA
2. Weeds in pond or along dike at water line.			Yes No NA
3. Dead fish or other organisms.			Yes No NA
4. Scum or debris accumulation along dike.			Yes No NA
5. Odor, foam, floating solids or oil sheen.			Yes No NA
6. Effluent structure improperly maintained.			Yes No NA
7. Excessive algae or duckweed.			Yes No
8. Facility is in compliance with this Section O above.			
Notes:			

NA			
Section P DISTRIBUTION SYSTEM			Yes No NA
1. Line breaks (big lines).			Yes No NA
2. Saddle breaks (big pipes to feeder lines).			Yes No NA
3. Tee breaks (underground piping).			Yes No NA
4. Joint leaks.			Yes No NA
5. Long or short risers broken (above ground piping) .			Yes No NA
6. Sprinkler head blowouts.			Yes No NA
7. Sprinklers damaged or missing.			Yes No NA
8. Sprinklers clogged.			Yes No NA
9. Sprinkler arms malfunctioning (due to vegetation interference).			Yes No
10. Facility is in compliance with this Section P above.			
Notes:			

NA			
Section Q COLLECTION SYSTEM			
1. Has a sewer use ordinance been enacted? Who enforces the ordinance <i>Debbie Pace, pretreatment coordinator; Ray Tarker, Collections - JWSC</i>			Yes No NA
2. Are accurate updated maps of the collection system and lift stations available?			Yes No NA
3. Are right-of-ways for major interceptor sewer lines maintained and inspected annually? Frequency _____			Yes No NA
4. Are inspection and maintenance records for lift stations available and up to date?			Yes No NA
5. Has a written inspection and maintenance program for the collection system been authored?			Yes No NA
6. Has a spare parts inventory been established for the lift stations to ensure continuous operation?			Yes No NA
7. Are all lift stations in service and properly maintained?			Yes No NA
8. Is Mfg. literature available to personnel on all lift station equipment?			Yes No NA
9. Is there an adequate alarm system and written emergency procedure in place for each lift station?			Yes No NA
10. Are P&S plans submitted to GA EPD for approval prior to construction or installation?			Yes No NA
11. Lift Station Inventory ( <i>*Nine lift stations – list attached</i> ); Stations site-visited as indicated below:			
<u>Station Name or Location</u>		<u>Comments</u>	
#3101 (Southport Parkway) Dual <i>Flyght</i> (20 hp each) submersible pumps; fenced; emergency connect piping; SCADA, visual/audible alarms.			
#3114 (Somersby) Dual <i>Flyght</i> (10 hp each) submersible pumps; fenced; emergency connect piping; SCADA, demonstrated: visual functioned, <b>audible – repair needed</b> .			
#3123 (Clearwater) Dual <i>Flyght</i> (20 hp each) submersible pumps; fenced; emergency connect piping; SCADA, visual/audible alarms.			
#3103 (Royal Oaks #1) Dual <i>Flyght</i> (20 hp each) submersible pumps; fenced; emergency connect piping; SCADA, Demonstrated: <b>visual – repair needed</b> , audible functioned.			
12. Facility is in compliance with this Section Q above.			Yes No



Section R CONSTRUCTED WETLANDS		NA		
1. Is the wetland flow pattern in a series	or in parallel	?		Yes No NA
2. Is the wetland's vegetation vigorous and healthy?				Yes No NA
3. Is plant coverage at least 90% of each cell, except deep water zones or sediment traps?				Yes No NA
4. Has exotic vegetation taken over cells? (Exotic plants should be removed)				Yes No NA
5. Are the interior and exterior earthen dikes eroded or leaking?				Yes No NA
6. Has the water depth been exceeded in any cell?				Yes No NA
7. Is there standing water present at the toe of the earthen dikes?				Yes No NA
8. Are the dikes stabilized with grass and being regularly cut?				Yes No NA
9. Are there trees, bushes, or weeds present on the interior or exterior dikes?				Yes No NA
10. Has sediment formed in the cells?				Yes No NA
11. Is sediment being removed from the deep water zones periodically?				Yes No NA
12. Have burrowing animals caused damage to the earthen dikes?				Yes No NA
13. Is each cell identified by a sign?				Yes No NA
14. Does the perimeter fence have no trespassing signs around the entire site?				Yes No NA
15. Is the perimeter fence gate locked?				Yes No NA
16. Does the entrance have signage identifying the facility as wastewater treatment plant?				Yes No NA
17. Are access roads well maintained? (no ruts, pot holes, etc.)				Yes No NA
18. Are all drain pipes connecting each cell free from obstruction?				Yes No NA
19. Has a mosquito control plan been implemented as necessary?				Yes No NA
20. Facility is in compliance with this Section R above.				Yes No NA
Notes:				

## Section S - FLOW MEASUREMENT

NA

1. Flow Measurement devices and methods: <b>Influent Measurement</b> Primary Device (e.g. Parshall flume, weir, etc.): <u>Montana (parshall) flume - ? 18"</u> Secondary Device (e.g. transducer, float, strip gauge, etc.): <u>totalizer.</u>  <b>Effluent Measurement</b> Primary Device: <u>18" parshall flume (0.13"=0.19 MGD)</u> Secondary Device: <u>totalizer (0.18 MGD). Accuracy 94.7%</u>  Other method of estimating flow: <u>N/A</u>	Yes No NA
2. Flow measurement devices designed to meet permit requirements ("continuously measure", "continuously record", etc.)	Yes No NA
3. Flow measurement location is representative of the actual discharge (considering return and bypass lines, etc.)	Yes No NA
4. Flumes: <ul style="list-style-type: none"> <li>Approach channel straight for at least 10 times the maximum head height in flume.</li> <li>Flow enters flume evenly distributed across the channel and free of turbulence, boils, or other disturbances.</li> <li>The flume is clean and free of debris or deposits.</li> <li>All flume dimensions appear accurate, level, and plumb.</li> <li>Flume head being measured properly</li> <li>Flume is appropriately sized to measure the existing range of flows.</li> <li>No obstructions downstream causing inaccurate flow measurement due to excessive "submergence" in flume.</li> <li>Proper flow tables being used.</li> </ul>	Yes No NA Yes No NA Yes No NA Yes No NA Yes No NA Yes No NA Yes No NA
5. Weirs: <ul style="list-style-type: none"> <li>Approach channel straight for at least 10 times the maximum head height.</li> <li>Flow in the approach channel is evenly distributed and free of turbulence, boils, or other disturbances.</li> <li>No solids accumulation in the bottom of the approach channel.</li> </ul>	Yes No NA Yes No NA Yes No NA



<ul style="list-style-type: none"> <li>Weir crest is located at least two times the maximum head height off the floor of the flow channel.</li> <li>The weir plate is level, plumb and without distortions.</li> <li>Weir is beveled on downstream side if plate is &gt;1/8 inch thick.</li> <li>No leakage around weir plate.</li> <li>Measuring point located at least 3 times the maximum head height behind (upstream of) the weir.</li> <li>There is free-fall and access for air below the nappe of the weir (i.e. water doesn't cling to the weir plate).</li> <li>Weir sized properly to measure the existing range of flows.</li> <li>Proper flow tables being used for weir type and size.</li> </ul>	Yes	No	NA
6. Secondary device properly installed and maintained, and operating without interference from foam, turbulence, webs, etc.	Yes	No	NA
7. Date of last flow meter calibration: <b>calibrates 3/week</b> Performed by: <b>Anthony Crawford, Class I WQ operator.</b>			
8. Calibration checks by plant personnel routinely performed.	Yes	No	NA
9. Calibration records (external and internal checks) maintained.	Yes	No	NA
10. Facility is in compliance with Section S above?	Yes	No	NA
Notes:			

## Section T - LABORATORY

NA

1. On-site lab is certified? <u>All laboratory analyses are done at the certified Brunswick lab, which has certified Laboratory Analysts.</u> a. List parameters analyzed on-site that are used for DMR reporting: <u>N/A</u> b. List additional parameters analyzed for internal monitoring and process control: _____	Yes	No	NA
2. EPA-approved analytical procedures are used on the on-site laboratory (40 CFR 136.3)	Yes	No	NA
3. Adequate equipment and procedures used for on-site analyses: <ul style="list-style-type: none"> <li>BOD, TSS, pH, DO, residual chlorine, Temperature, Other</li> </ul>	Yes	No	NA
4. On-site laboratory records include: <ul style="list-style-type: none"> <li>Calibration and maintenance equipment</li> <li>Equipment operating instructions and manuals</li> </ul>	Yes	No	NA
5. Satisfactory calibration and maintenance of instruments.	Yes	No	NA
6. Satisfactory refrigeration in use (< 4°C).	Yes	No	NA
7. Duplicate samples are analyzed <u>Brunswick Lab triplicate analyses</u> % of time.	Yes	No	NA
8. Spiked samples are used % of time.	Yes	No	NA
9. Certified contract laboratory being used: Laboratory name: <u>Brunswick WPCP</u> Address: <u>Hwy 341, Brunswick GA</u> Phone: <u>(912) 261-7146</u> Parameters: <u>BOD, fecal coliform, suspended solids, ammonia, phosphorous</u>	Yes	No	NA
10. EPA-approved analytical procedures identified on contract lab report. (40 CFR 136.3)	Yes	No	NA
11. Holding times being met by on-site and/or contract laboratory. <u>A couple of out-of-hold times now correct</u>	Yes	No	NA
12. SAMPLING (SELF-MONITORING PROGRAM) <ul style="list-style-type: none"> <li>Sampling locations, type, methods, and frequencies conform to the NPDES permit for all required samples.</li> <li>Sampling locations and methods provide representative samples.</li> <li>a. Grab samples are collected during peak flow conditions rather than low-stress conditions.</li> </ul>	Yes	No	NA

b. Composite sampling procedures comply with the permit (time vs. flow weighted). • Automatic samplers and other sampling equipment are properly cleaned. • Samples are preserved using methods listed in 40 CFR, Part 136 (e.g. chilled, acidified, etc.) • Sample containers are as listed in 40 CFR, Part 136. • Chain-of-custody is maintained and documented. • Samples are collected using approved protocols: a. Coliform sample taken directly into sterilized container. b. BOD samples are taken prior to disinfection or reseeded. c. Oil and grease collected directly into a glass container. d. Other:	Yes No NA Yes No NA Yes No NA Yes No NA Yes No NA Yes No NA Yes No NA Yes No NA
13. The facility is in compliance with Section T above?	Yes No
Notes:	

### Section U - EFFLUENT/RECEIVING WATERS

NA

1. Violations of discharge limits	Yes No NA						
2. Spills/bypasses <u>A minor spill occurred April 4, 2011 but did not enter Little Satilla River.</u>	Yes No NA						
3. Fish kills or other receiving water impacts	Yes No NA						
EFFLUENT/RECEIVING WATERS OBSERVATIONS (Further explanation attached) <input type="checkbox"/> N/E							
OUTFALL NO.	OIL SHEEN	GREASE	TURBIDITY	VISIBLE FOAM	VISIBLE FLOAT SOLIDS	COLOR	OTHER
4. Has reclaimed wastewater for non-restricted access areas met urban water reuse standards?							Yes No NA
5. Has reclaimed wastewater for restricted access areas been pretreated to secondary levels and received disinfection? <u>The facility only reuses partial wastewater on clarifier and bar screen rinsing.</u>							Yes No NA
6. The facility is in compliance with Section U above?							Yes No NA
Notes:							

### Section V - OPERATIONS AND MAINTENANCE

1. Preliminary treatment units (bar screens, comminutors, grit channels, etc.) properly maintained with wastes properly disposed.	Yes No NA
2. Adequate oxygen maintained in aerated treatment systems.	Yes No NA
3. No operational problems caused by hydraulic "short-circuiting" in treatment units.	Yes No NA
4. Bio-solids wasting/return rates adequate to maintain system equilibrium.	Yes No NA
5. O&M Manuals and supporting information organized and maintained for use: • Plant O&M Manual • Equipment manuals • Plant engineering drawings • Collection system drawings available or in development • Maintenance records/costs	Yes No NA Yes No NA Yes No NA Yes No NA Yes No NA
6. Has there been a by-pass at the facility since the last inspection?	Yes No NA



7. If required, has the facility followed proper spill notification procedures?	Yes	No	NA
8. Routine and preventive maintenance items are scheduled and performed on time.	Yes	No	NA
9. The amount of maintenance activities and parts in back-log is acceptable.	Yes	No	NA
10. Operational problems contributing to plant upset, excessive odors, effluent violations, etc.	Yes	No	NA
11. Level of operator certification as required by the permit and staffing level as specified in O&M Manual.	Yes	No	NA
12. Auxiliary power available as required by the permit and operates the necessary treatment units.	Yes	No	NA
13. Alarm systems for power and equipment failure.	Yes	No	NA
14. Treatment control procedures are established for emergencies.	Yes	No	NA
15. Hydraulic surges are handled without excessive solids wash-out or bypasses.	Yes	No	NA
16. Spare pumps and parts readily available.	Yes	No	NA
17. Facility appears to be well operated and maintained.	Yes	No	NA
18. The facility is in compliance with Section V above?	Yes	No	NA
Notes:			

### Section W - SLUDGE DISPOSAL

NA

1. Has permittee developed and implemented procedures to insure adequate year-round sludge disposal.	Yes	No	NA
2. Records maintained to document the quantity of solids removed from the plant.	Yes	No	NA
3. Method of sludge disposal: <ul style="list-style-type: none"> <li>Land application</li> <li>Permitted landfill</li> <li>Other</li> </ul>	Yes	No	NA
4. Total amount of sludge disposed previous 12 months: <u>19.38 (based on 4 months)</u> tons			
5. The facility is in compliance with Section W above?	Yes	No	
Notes:			

### Section X - BIO-SOLIDS REPORT

NA

1. Bio-solids annual report <ul style="list-style-type: none"> <li>Year of coverage _____</li> <li>Date submitted to EPD District Office _____ (submit no later than 31 January)</li> <li>Date submitted to EPA _____ (submit no later than 19 Feb)</li> </ul>	Yes	No	NA
2. Adequate sampling based on tonnage.	Yes	No	NA
3. Facility is in compliance with this Section X above.	Yes	No	
Notes:			

### Section Y - SAFETY

NA

1. Are fire extinguishers present?	Yes	No	NA
2. Are First-aid kits available?	Yes	No	NA
3. Is there self-contained breathing apparatus or canister masks?	Yes	No	NA
4. Is there a chlorine repair kit?	Yes	No	NA
5. Is there a chlorine gas detector (alarm)?	Yes	No	NA
6. Are there safety signs, painted highlights and other warnings?	Yes	No	NA
7. The facility is in compliance with Section Y above?	Yes	No	



Notes:

**Section Z - PLANT GROUNDS**

NA

1. The grounds are poorly kept, i.e. grass needs cutting?	Yes	No	NA
2. Buildings, equipment, etc. need painting?	Yes	No	NA
3. The all-weather roads are potholed or otherwise in disrepair?	Yes	No	NA
4. The facility is in compliance with Section Z above?	Yes	No	

Notes:

**ADDITIONAL NOTES/DIAGRAMS:**

*The 1.5 MGD facility, upgraded from a .3 MGD overspray marsh Plant to a constructed direct discharge Plant within the last year, has such a low flow, only partial oxidation ditches and clarifiers are in use. With start-up issues failing to meet phosphorous, the facility has complied with phosphorous and other limits for six to seven months, but are under an open Consent Order (EPD-WQ-5281), executed March 22, 2011. It is anticipated a final report as to how phosphorous was achieved by December 2011, and so long as phosphorous continues to be met, the Order may be closed out.*

*Overall operations were satisfactory. A few operational issues were discussed above, and JWSC will be apprised of those issues.*



United States Environmental Protection Agency  
Washington, D.C. 20460

# Water Compliance Inspection Report

Major/Minor: \_\_\_\_\_

Section A: National Data System Coding (i.e., PCS)

NPDES/LAS: \_\_\_\_\_

Transaction Code 1 <u>W</u> 2 <u>5</u>	NPDES 3 <u>GA0038938</u> 11	yr/mo/day 12 <u>110919</u> 17	Inspection Type 18 <u>C</u>	Inspector 19 <u>S</u>	Fac Type 20 <u>1</u>
21 <u>COMPLIANCE EVALUATION CONDUCTED</u>					
Inspection Work Days 67 <u>15</u> 69	Facility Self-Monitoring Evaluation Rating 70 <u>4</u>	BI 71 <u>N</u>	QA 72 <u>N</u>	Reserved 73 <u>  </u> 74 <u>  </u> 75 <u>  </u> 76 <u>  </u> 77 <u>  </u> 78 <u>  </u> 79 <u>  </u> 80 <u>  </u>	

## Section B: Facility Data

Name and Location of Facility Inspected (For industrial users discharging to POTW, also include POTW name and NPDES permit number) <u>EXTR 29 WPCP, SOUTH NEW PORT, GLYNN</u>	Entry Time/Date <u>10:00 am 9/19/11</u>	Permit Effective Date <u>7/12/11</u>
	Exit Time/Date <u>4:00 pm 9/19/11</u>	Permit Expiration Date <u>2/24/13</u>
Name(s) of On-Site Representative(s)/Title(s)/Phone and Fax Number(s) <u>ANTHONY CRAWFORD, CLASSIWO OPERATOR</u> <u>912-717-0279 (C)</u> <u>912-261-7178 (F)</u>	Other Facility Data (e.g., SIC NAICS, and other descriptive information)  River Basin: <u>SATILLA</u> County: <u>GLYNN</u>	
Name, Address of Responsible Official/Title/Phone and Fax Number <u>KEITH P. MORGAN, EXECUTIVE DIRECTOR, JWS</u> <u>912-261-7110</u> <u>912-261-7178 (F)</u>	Sensitive Area <u>CN</u> : _____	

## Section C: Areas Evaluated During Inspection (Check only those areas evaluated)

<input checked="" type="checkbox"/> Permit	<input checked="" type="checkbox"/> Self-Monitoring Program	<input checked="" type="checkbox"/> Pretreatment	<input type="checkbox"/> MS4
<input checked="" type="checkbox"/> Records/Reports	<input checked="" type="checkbox"/> Compliance Schedules	<input checked="" type="checkbox"/> Pollution Prevention	
<input checked="" type="checkbox"/> Facility Site Review	<input checked="" type="checkbox"/> Laboratory	<input checked="" type="checkbox"/> Storm Water	
<input type="checkbox"/> Effluent/Receiving Waters	<input checked="" type="checkbox"/> Operations & Maintenance	<input type="checkbox"/> Combined Sewer Overflow	
<input checked="" type="checkbox"/> Flow Measurement	<input checked="" type="checkbox"/> Sludge Handling/Disposal	<input checked="" type="checkbox"/> Sanitary Sewer Overflow	

## Section D: Summary of Findings/Comments

(Attach additional sheets of narrative and checklists, including Single Event Violation codes, as necessary)

SEV Codes	SEV Description
<u>00320</u>	<u>AUDIBLE ALARM/USUAL ALARM MALFUNCTIONS AT ALL PT STATIONS</u>
<u>  </u>	<u>  </u>
<u>  </u>	<u>  </u>
<u>  </u>	<u>  </u>

Name(s) and Signature(s) of Inspector(s) <u>GARY R EYNOLDS</u> 	Agency/Office/Phone and Fax Numbers <u>EPD, CDS/912-264-7284</u> <u>912-262-3160 (F)</u>	Date <u>9/26/11</u>
Signature of Management Q A Reviewer	Agency/Office/Phone and Fax Numbers	Date

**From:** Ray Tarker <RTarker@bgjwsc.org>  
**To:** Gary Reynolds <Gary.Reynolds@dnr.state.ga.us>  
**Date:** 9/19/2011 1:05 PM  
**Subject:** RE: Exit 29 WWTP Lift Stations

CD SOUTH  
FILES

Gary;

The complete system is in GIS (manholes, lines, Lift Stations, WWTP) and accurately portrayed; (we did this ourselves so I trust what we are showing).

We are in the midst of inspecting these facilities and it will be a while before gravity lines and manholes can be completely assessed; however, the lift stations are in process with most already inspected.

With the exception of some manholes that I believe will need rehabilitation work due to corrosion damage and several gravity lines in Somersby Point with issues that will require repair; the area system is in generally good shape.

If you need a GIS map showing this system just let me know.

Ray Tarker

-----Original Message-----

From: Gary Reynolds [mailto:Gary.Reynolds@dnr.state.ga.us]  
Sent: Monday, September 19, 2011 11:53 AM  
To: Ray Tarker  
Subject: Re: Exit 29 WWTP Lift Stations

Thanks Ray...are you mapping the location of manholes, interceptors as with Brunswick? These are type of questions we'll ask Glenn this afternoon. Along that lines...any idea as to: number of manholes, and of those, which have been "tagged" for refurbishment, or have already been refurbished?

>>> Ray Tarker <RTarker@bgjwsc.org> 9/19/2011 10:26 AM >>>  
JWSC Wastewater Lift Stations discharging to Exit 29 WWTP (as of September 19, 2011)

Pump

Pump Discharge

Pump

Pump

Motor

Number



SID

Location

System

Size (inches)

Discharge Gpm

Manuf.

H.P.

Pumps

Model

Imp

LS # 3101

SOUTHPORT PARKWAY

Submersible

6

780 @ 60'

FLYGT

20

2

CP3152

434

LS # 3102

FLYING J

Submersible

4

140 @ 30'

FLYGT

3

2

780 @ 60'

FLYGT

20

2

CP3152

434

LS # 3102

FLYING J

Submersible

4

140 @ 30'

FLYGT

3

2

CP3085

434

LS # 3103

ROYAL OAKS #1

Submersible

6

FLYGT

20

2

CP3153

436

LS # 3104

ROYAL OAKS #2

Submersible

4

FLYGT

3

2

LS # 3114

SOMERSBY

Submersible

6

350 @ 45'

FLYGT

10

2

CP3127

483

LS # 3121

MAJESTIC OAKS

Submersible

4

350 @ 57.92'

FLYGT

10

2

CP3127

483



LS # 3123

CLEARWATER

Submersible

4

230 @ 103'

FLYGT

20

2

CP3152

454

LS # 3129

SATILLA SANDS

Submersible

4

317 @ 65'

FLYGT

10

2

CP3127

483

LS # 3130

IAP

Submersible

225 @ 70'

FLYGT

12

2

NP3153

466



## Special Waste Management Decision

I. Decision Request: ☐ Initial ☒ Renewal ☐ Amendment

Management Facility: Broadhurst Environmental Landfill

Intermediate Transfer Facility: NA

Generator Name: United Water Services

Billing Name: SWS-Brunswick

Address: US Hwy 17 & I-95 Southport Pkway  
Brunswick, GA 31520

Address: 126 Perry Land Rd, Brunswick, GA 31522

Contact: Ronnie McKinnon

Consultant Name: NA

Phone: 912-217-1374

Consultant Phone: NA

Site Location: Same

Transporter Name: RWS-Brunswick

Transporter Phone: 912-267-6400

Waste Name: Domestic WWTP Sludge-analytical attached

Estimated Quantity: 100 tons/year

II. Special Waste Manager Decision:

☒ Approved

☐ Disapproved

If disapproved, Explain:

Precautions, Conditions or  
Limitations on approval

\*Manifest each load

\*No free liquids

Problematic Special Waste according to Republic? ☐ Yes ☒ No

If yes, which one?

Approved by Special Waste Review Committee? ☐ Yes ☐ No ☒ Not Applicable

Management Method(s): ☒ Landfill ☐ Solidification ☐ Bioremediation ☐ Other:

Approval Number: 60326

Decision Expiration Date: 4/15/2012

Attached Document(s): ☐ None ☐ MSDS ☐ Memo/Letter ☐ Process Knowledge

☒ Certified Analytical Report ☒ If certified analytical attached, all units have been properly converted (e.g. ppb to ppm)

Special Waste Mgr. Signature: Joyce Dishmon

Name (print): Joyce Dishmon

Date: 4/15/2009

III. Facility Operations Acknowledge:

☒ Approved

☐ Disapproved

State any additional Precautions,  
Conditions or Limitations on  
Approval

By signing below, the GM agrees that a fully executed Special Waste Service Agreement is  
on file for this profile and that the special waste file is complete.

Facility Manager Signature: Jeff McElhan

Jeff McElhan for  
Name (print): John Simmons

Date: 4/15/09

Form SW03 Revised 9/2008



**Table 13-7:**

**1 1/2 ft. Parshall Flume Discharge Table with Head in Feet**

Formula:  $CFS = 6.000 H^{1.538}$   
 $GPM = 2693 H^{1.538}$   
 $MGD = 3.878 H^{1.538}$

Where: H = head in feet

Values in italics indicate flow below the recommended range of this particular primary device.

**Table 13-6 (Continued)**

Head (feet)	CFS	GPM	MGD
2.26	13.84	6209	8.942
2.27	13.93	6251	9.002
2.28	14.02	6293	9.062
2.29	14.12	6335	9.123
2.30	14.21	6377	9.184
2.31	14.30	6419	9.244
2.32	14.40	6462	9.305
2.33	14.49	6504	9.366
2.34	14.59	6547	9.428
2.35	14.68	6589	9.489
2.36	14.78	6632	9.551
2.37	14.87	6675	9.612
2.38	14.97	6718	9.674
2.39	15.07	6761	9.736
2.40	15.16	6804	9.798
2.41	15.26	6847	9.860
2.42	15.35	6890	9.923
2.43	15.45	6934	9.985
2.44	15.55	6977	10.05
2.45	15.64	7021	10.11
2.46	15.74	7064	10.17
2.47	15.84	7108	10.24
2.48	15.94	7152	10.30
2.49	16.04	7196	10.36
2.50	16.13	7240	10.43

**Table 13-7**

Head (feet)	CFS	GPM	MGD
0.01	0.0050	2.26	0.0033
0.02	0.0146	6.57	0.0095
0.03	0.0273	12.25	0.0178
0.04	0.0425	19.06	0.0275
0.05	0.0599	26.87	0.0387
0.06	0.0792	35.57	0.0512
0.07	0.1004	45.08	0.0649
0.08	0.1233	55.36	0.0797
0.09	0.1478	66.35	0.0955
0.10	0.1738	78.03	0.1124
0.11	0.2013	90.34	0.1301
0.12	0.2301	103.3	0.1487
0.13	0.2603	116.8	0.1682
0.14	0.2917	130.9	0.1885
0.15	0.3243	145.6	0.2096
0.16	0.3582	160.8	0.2315
0.17	0.3932	176.5	0.2541
0.18	0.4293	192.7	0.2775
0.19	0.4665	209.4	0.3015
0.20	0.5048	226.6	0.3263
0.21	0.5442	244.2	0.3517
0.22	0.5845	262.4	0.3778
0.23	0.6259	280.9	0.4045
0.24	0.6682	299.9	0.4319
0.25	0.7115	319.4	0.4599
0.26	0.7558	339.2	0.4885
0.27	0.8009	359.5	0.5177
0.28	0.8470	380.2	0.5474
0.29	0.8940	401.2	0.5778
0.30	0.9418	422.7	0.6087
0.31	0.9905	444.6	0.6402
0.32	1.040	466.8	0.6722
0.33	1.091	489.5	0.7048
0.34	1.142	512.4	0.7379
0.35	1.194	535.8	0.7716
0.36	1.247	559.5	0.8058
0.37	1.300	583.6	0.8404
0.38	1.355	608.1	0.8756
0.39	1.410	632.8	0.9113
0.40	1.466	658.0	0.9475
0.41	1.523	683.4	0.9842
0.42	1.580	709.2	1.021
0.43	1.638	735.4	1.059
0.44	1.697	761.8	1.097
0.45	1.757	788.6	1.136
0.46	1.817	815.8	1.175
0.47	1.879	843.2	1.214
0.48	1.940	870.9	1.254
0.49	2.003	899.0	1.295
0.50	2.066	927.4	1.335

**Table 13-7 (Continued)**

Head (feet)	CFS	GPM	MGD
0.51	2.130	956.0	1.377
0.52	2.195	985.0	1.418
0.53	2.260	1014	1.461
0.54	2.326	1044	1.503
0.55	2.392	1074	1.546
0.56	2.460	1104	1.590
0.57	2.527	1134	1.634
0.58	2.596	1165	1.678
0.59	2.665	1196	1.723
0.60	2.735	1228	1.768
0.61	2.805	1259	1.813
0.62	2.876	1291	1.859
0.63	2.948	1323	1.905
0.64	3.020	1356	1.952
0.65	3.093	1388	1.999
0.66	3.167	1421	2.047
0.67	3.241	1455	2.095
0.68	3.316	1488	2.143
0.69	3.391	1522	2.192
0.70	3.467	1556	2.241
0.71	3.543	1590	2.290
0.72	3.620	1625	2.340
0.73	3.698	1660	2.390
0.74	3.776	1695	2.441
0.75	3.855	1730	2.491
0.76	3.934	1766	2.543
0.77	4.014	1802	2.594
0.78	4.094	1838	2.646
0.79	4.175	1874	2.699
0.80	4.257	1911	2.751
0.81	4.339	1948	2.805
0.82	4.422	1985	2.858
0.83	4.505	2022	2.912
0.84	4.589	2060	2.966
0.85	4.673	2097	3.020
0.86	4.758	2135	3.075
0.87	4.843	2174	3.130
0.88	4.929	2212	3.186
0.89	5.015	2251	3.242
0.90	5.102	2290	3.298
0.91	5.190	2329	3.354
0.92	5.278	2369	3.411
0.93	5.366	2409	3.468
0.94	5.455	2449	3.526
0.95	5.545	2489	3.584
0.96	5.635	2529	3.642
0.97	5.725	2570	3.701
0.98	5.816	2611	3.759
0.99	5.908	2652	3.819
1.00	6.000	2693	3.878

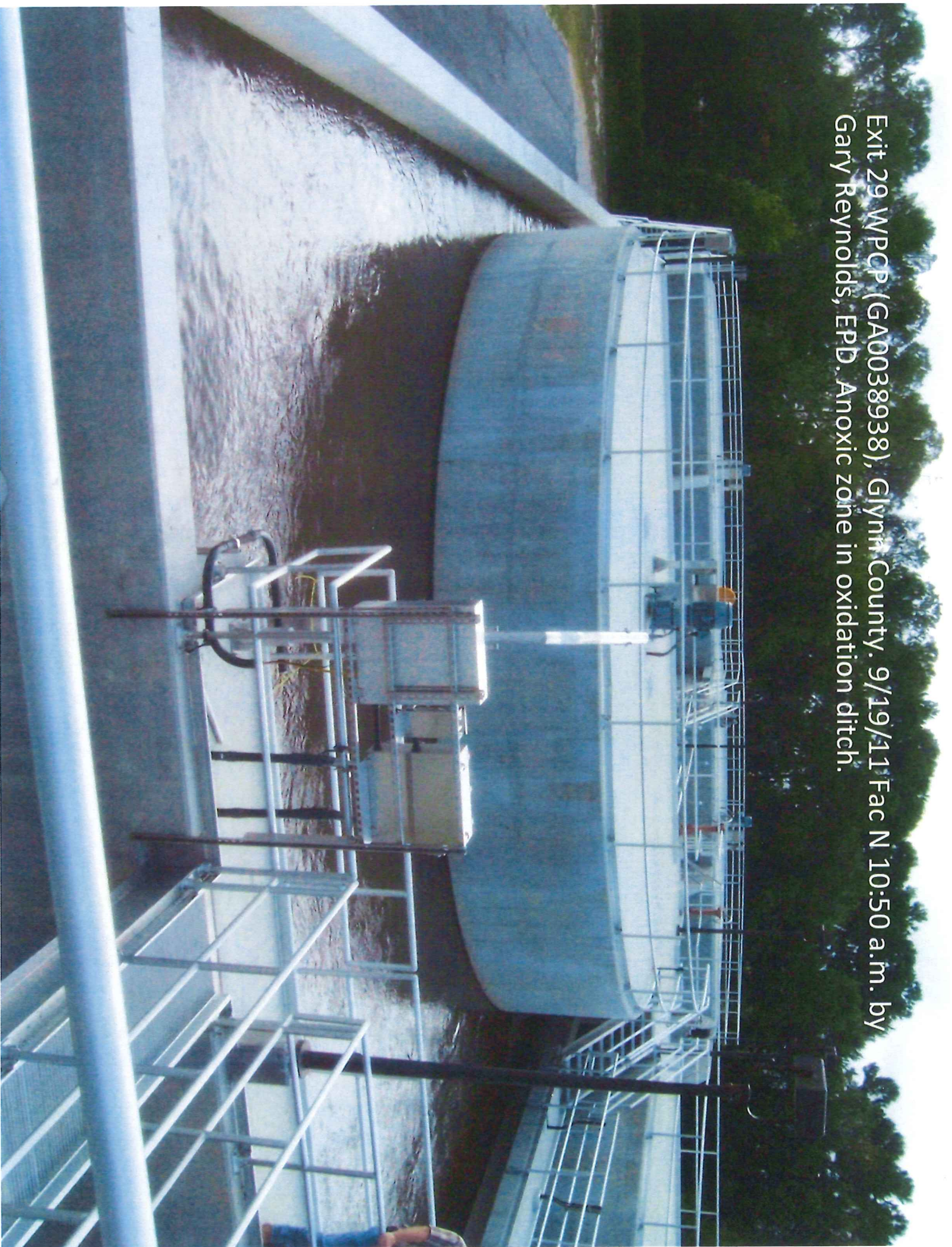


Exit 29 WPCP (GA0038938), Glynn County. 9/19/11 Fac E 10:40 a.m. by Gary Reynolds, EPD. Influent automatic bar screen. Mark Ryals (left) Class I WQ Supt., Alvin Lang, Class I WQ operator.





Exit 29 WPCP (GA0038938), Glynn County. 9/19/11 Fac N 10:50 a.m. by  
Gary Reynolds, EPD. Anoxic zone in oxidation ditch.





Exit 29 WPCP (GA0038938), Glynn County. 9/19/11 Fac N 10:54 a.m. by Gary Reynolds, EPD. Macroslid pass-through accumulation in anoxic zone, should be physically scraped and removed, or screened, and removed.





Exit 29 WPCP (GA0038938), Glynn County. 9/19/11 Fac N 11:00 a.m. by Gary Reynolds, EPD. Oxidation ditch, highest oxygen levels (8.0 mg/l average, middle section).



Exit 29 WPCP (GA0038938), Glynn County. 9/19/11 Fac W 11:05 a.m. by Gary Reynolds, EPD. Active secondary clarifier of two.





Exit 29 WPCP (GA0038938), Glynn County. 9/19/11 Fac NE 11.15 a.m. by Gary Reynolds, EPD. Construction and demolition wastes mixed with belt-pressed sludge, needs to keep separate for accurate tonnage determinations.





Exit 29 WPCP (GA0038938), Glynn County. 9/19/11 Fac SW 11:25 a.m. by Gary Reynolds, EPD. Wastewater Reuse tank - only for in-Plant clarifier, other component rinsing, not purple pipe reuse off-site.







Exit 29 WPCP (GA0038938), Glynn County. 9/19/11 Fac NW 11:40 a.m. by Gary Reynolds, EPD. Lift Station 114. To the left is new Risley Middle School. Note: emergency connection at top of panel box. Demonstrated: visual, SCADA, audible non-operational.